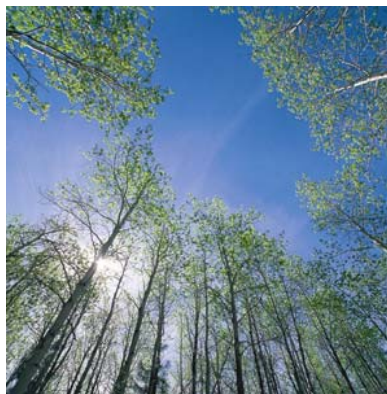


Compliance and Enforcement Report Fiscal Year 2000



**Commonwealth of Massachusetts
Department of Environmental Protection**



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INTRODUCTION

This summary report provides an overview of the Massachusetts Department of Environmental Protection's (DEP) compliance and enforcement activities for Fiscal Year (FY) 2000. It is the first in what will become an annual report on DEP's compliance and enforcement performance. In addition to providing descriptions of our enforcement initiatives and statistics, DEP hopes to initiate a public dialogue on the strategic importance of compliance and enforcement and how to better measure its impact on public health and the environment.

This report focuses on the more traditional measures of DEP's compliance and enforcement activities. The effectiveness of DEP's regulatory programs can be better understood, however, when measures focus more on the consequences of our actions rather than just the numerical accounting of our activities. DEP is in the process of developing improved performance measures for a number of its priority programs. In the meantime, there is still value in examining the more traditional measures as long as they are considered one tool among several regulatory tools for measuring positive environmental results.

Reviewing traditional compliance and enforcement program activity can provide a good indication of the level of deterrence a regulatory agency is maintaining by having a "cop on the beat" presence. Maintaining a solid regulatory presence through inspectors in the field and various types of enforcement responses to non-compliance is critical to maintaining a credible deterrence to those who might consider violating environmental rules. Monitoring compliance and enforcement trends can be helpful in assuring that a regulatory agency is maintaining an acceptable baseline effort of compliance and enforcement activities.

In addition to numerical analyses of compliance and enforcement activities, this report contains examples of strategic compliance and enforcement initiatives within DEP. Strategic compliance and enforcement supplements baseline compliance and enforcement activities by focusing particular attention on a subset of the regulated



universe or on a resource area of special concern. Such emphasis can be triggered by a number of factors such as:

- analysis of environmental monitoring data;
- the need to ensure compliance with a new regulation;
- a pattern of complaints from the public;
- a priority area of concern identified by the Administration; or
- a pattern of noncompliance by a particular sector.

Together, baseline compliance and enforcement activities, combined with strategic compliance and enforcement initiatives, produce a broad-based enforcement presence across all environmental areas and a concentrated focus on our most important problems. The two approaches work in concert to strike a balance between maintaining compliance, and exercising extra measures to fix compliance problems or to troubleshoot potential problems.

This analysis of DEP's compliance and enforcement activity measures will focus initially on data from FY 2000 and will be compared to data from FY 1999. There will also be a review of the "decade in numbers." For data sets with comparable degrees of reliability, there will be a comparison of compliance and enforcement activities from the beginning of the 1990s to the close of the 1990s.

This report is divided into three sections: Smarter Use of Compliance and Enforcement Tools, Activities, and The Future.



SECTION 1: SMARTER USE OF COMPLIANCE AND ENFORCEMENT TOOLS

Compliance and enforcement is a critical function in any regulatory agency. It should not be the only compass that determines the agency's direction, but rather a regulatory tool strategically used to help the agency achieve its environmental protection mission. DEP continues to expand and improve the strategic use of enforcement initiatives to support its efforts to achieve longer-term environmental goals.

CASE HIGHLIGHT

An Administrative Consent Order (ACO) was issued against a sand and gravel operation for violations of the hazardous waste, water pollution control, wetlands, solid waste and air quality regulations. In addition to paying a penalty, the company implemented a Supplemental Environmental Project that helped restore a local pond and donated five acres of land for conservation uses.

This section provides an overview on the creative strategies and results of some of DEP's more effective compliance and enforcement initiatives. Each of the examples focuses on the programmatic outcomes of compliance and enforcement initiatives instead of just a numerical count. In addition, illustrative examples of enforcement cases will be provided to help demonstrate the actual applications of an effective compliance and enforcement program.

This section is divided into the three major Bureaus under which DEP's regulatory authority over an expansive and diverse set of programs is organized: Bureau of Waste Prevention, Bureau of Resource Protection and Bureau of Waste Site Cleanup. It is worthy to note, however, that DEP's enforcement planning and field implementations increasingly involve many cross-Bureau and programmatic issues.

BUREAU OF WASTE PREVENTION

The Bureau of Waste Prevention (BWP) regulates air emission sources, solid and hazardous waste, industrial wastewater discharges and the Toxic Use Reduction Act (TURA). During FY 2000, BWP carried out its compliance and enforcement activities in three major categories: multimedia inspections, single media inspections and "other" activities. BWP continued to inspect major facilities in the air, water and hazardous waste programs and also continued a program to incorporate pollution prevention (P2) activities into enforcement actions. The FY 2000 inspections also targeted certain key industrial sectors to address hazardous air pollutants, complaints, referrals, and facilities operating without required permits. Nearly one-half of these inspections were multimedia inspections covering matters regulated across the three Bureaus.

CASE HIGHLIGHT

A coordinated investigation by the Environmental Strike Force and regional staff yielded a civil penalties and reimbursements of over \$490,000 from a state agency and its contractors for illegal removal and disposal of asbestos during demolition of a building.



The Stage II Program focuses on controlling air emissions from gasoline dispensing facilities that contribute to the formation of ozone. Through a coordinated state-wide enforcement action against 16 major corporations combined with a strategic number of facility inspections, DEP was able to bring over 1600 stations into compliance and eliminate over 4,500 tons of emissions.

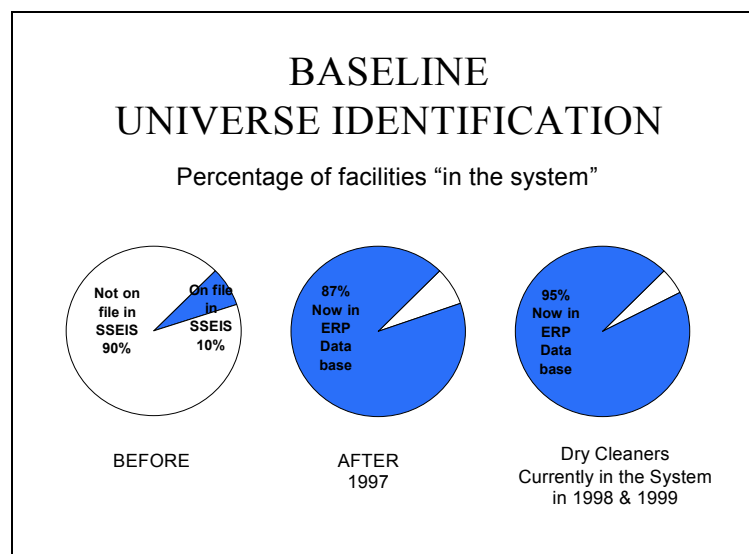
The Bureau also targeted gas stations and gasoline storage facilities, to determine if they had installed and were properly operating Stage II vapor recovery equipment that reduces volatile emissions in accordance with the State Implementation Plan.

Innovative Approaches to Achieving Environmental Results

The traditional approach of controlling pollution through enforceable permits backed up with monitoring, inspections, penalties and enforcement orders addressing non-compliance will continue to be one of the most effective tools to regulate large sources of pollution. But that approach has not proven as effective at regulating smaller sources.

Environmental Results Program

The Environmental Results Program (ERP) is a unique environmental performance initiative that features a multimedia, sector-based regulatory approach that replaces state permits with industry-wide environmental performance standards and annual certification of compliance. ERP was initiated in 1997 in two sectors: dry cleaners and photo processors; printers were added in 1998. These industries were chosen, in part, because they represented an increasingly important aspect of environmental protection: individually small but collectively significant sources of pollution that were too numerous to be addressed within the traditional permitting and compliance inspection framework. Through the use of self-certification forms, compliance assistance workbooks and environmental business practice indicators to more comprehensively measure both facility and industry-wide performance, ERP's objective is not simply high compliance rates, but also the adoption of P2 practices that go beyond compliance.



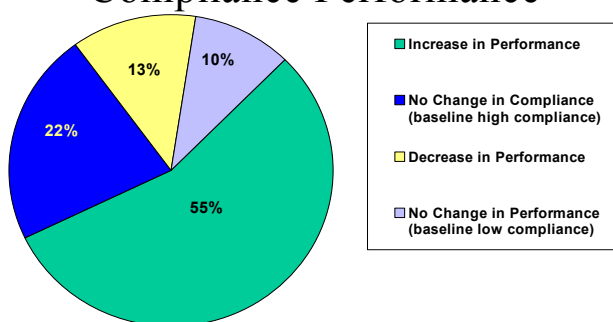
CASE HIGHLIGHT

A plastics manufacturing company failed to submit a toxic use reduction plan and toxic use reports required under TURA, or to comply with the hazardous waste management regulations. In addition to paying a penalty, DEP recommended the company contacted the Office of Technical Assistance for advice on pollution prevention opportunities. As a result, the company found a less toxic raw material to manufacture its products, eliminated over 100,000 pounds of toxics and were no longer required to file under TURA.

CASE HIGHLIGHT

A paper mill was determined to be in violation of its industrial wastewater discharge limits. In addition to making operating changes at its facility to return to compliance, the ACO required the company to provide assistance and upgrades to the town's waste water treatment plant that will reduce the town's hazardous waste generation by approximately 70 gallons per month.

Dry Cleaners: Comparison of Baseline and Round 2 Compliance Performance



Inspections continue to play a role in ERP in order to audit program and the sector performance, and to deter non-compliance. In FY 2000, BWP conducted more than 120 random and targeted inspections and issued both field and certification related enforcement. Random inspections are determined on statistical formulas developed to produce a 95 percent degree of confidence in the assessment of compliance levels. For photo processors and dry cleaners, random inspections showed good overall compliance with regulatory standards. For example, most photo processors had installed silver recovery units to prevent excess silver discharges to the sewer. Targeted inspections are employed where information received from a facility indicates potential patterns of non-compliance.

Pollution Prevention

Traditional enforcement measures success in terms of the number of “outputs” such as enforcement actions or penalty dollars assessed. While these measures serve a valid purpose, DEP is increasingly looking towards compliance and enforcement alternatives that produce broader and more permanent environmental results.

Motivating the regulated community to eliminate or reduce the volume and toxicity of its waste streams is one of DEP's core strategic objectives. DEP often takes the opportunity presented by compliance and enforcement actions against facilities for failure to comply with the Toxics Use Reduction Act, mismanagement of hazardous waste or pollutant discharges to require companies to investigate whether pollution prevention is the solution to their compliance problems. Putting P2 into practice often means economic and regulatory benefits to the company, in addition to elimination or reductions in waste and emissions.

Training programs provided some of the most common P2 opportunities. Training better ensures that employees are aware of



CASE HIGHLIGHT

Department of Public Works' (DPW) yards were targeted for inspections as part of a statewide compliance initiative. In one set of cases, inspections revealed multiple violations of the hazardous waste and used oil management regulations. In return for a partial waiver of penalties, DPW officials agreed to perform environmental audits for each of their highway facilities and to conduct seminars in the surrounding communities to educate other officials about the violations and how to properly comply with the regulations.

CASE HIGHLIGHT

A clothing manufacturing company was found to be operating in violation of the air quality and hazardous waste regulations. A coordinated enforcement action by two DEP regional offices led to a \$340,000 penalty and the company's adoption of an Environmental Management System at all its Massachusetts facilities.

environmental requirements such as testing, operation and regular maintenance of Stage II vapor recovery systems. In a few cases, companies agreed to a lower permit level, resulting in reduced emissions. Other P2 activities included requirements to consult with the Office of Technical Assistance, specific equipment replacement to reduce discharges and emissions, or replacement of manufacturing materials with zero or far less toxic materials. BWP has initiated a project to quantify the P2 gains it has achieved through its administrative orders as an alternative means to measure the long-term effectiveness of its enforcement programs.

Estimated Pollution Prevented by partial sample of BWP Consent Orders Issued Between October 1, 1999 and March 31, 2000.

Pollutant reduced in consent order	Tons reduction per year: (unless otherwise indicated)
Waste Oil	1
Other Hazardous Waste (HW)	5.1
SOX	8
NOX	7
Hazardous Air Pollutants (HAPs)	7
Perchloroethylene (Dry Cleaners)	1
Other Volatile Organic Compounds	38
Toxics Use	54
Total Suspended Solids	27
Industrial Waste water.	2 million gallons

Supplemental Environmental Projects and Environmental Management Systems

Two other mechanisms the Department is using more frequently to achieve measurable environmental results are Supplemental Environmental Programs (SEPs) and Environmental Management Systems (EMS). SEPs cover a wide range of activities including, for example, conducting training, funding reclamation and conservation of open space, creating a community recycling center, using low emission vehicles or retrofitting diesel engines to reduce emissions.

EMS programs help facilities integrate compliance activities into routine business operations. Through a facility-wide set of management procedures and processes, organizations analyze, control and reduce the environmental impact of their activities, products and services and operate with greater efficiency and control.

BUREAU OF RESOURCE PROTECTION

The Bureau of Resource Protection (BRP) manages a diverse array of compliance and enforcement initiatives governing the protection, preservation, management and public access to the Commonwealth's water resources, waterways and the lands they border including wetlands and riverfronts.



CASE HIGHLIGHT

An ACO was issued to a municipality for violations of the Wetlands Protection Act. The ACO requires the restoration of 13,579 square feet of Bordering Vegetated Wetland and includes a SEP requiring that all city personnel attend a "Wetland Awareness Training Program". Approximately 14 city agencies and 180 personnel were trained. Additionally, the training consultant prepared an EMS dealing with the identification of procedures to be followed by the city departments where wetlands may be affected.

CASE HIGHLIGHT

An ACO was issued to the owners of a yarn dying facility for using water withdrawn from Mill Pond without a valid Water Management Act permit. The ACO included an SEP with an estimated value of \$12,000 to fund a hydraulic analysis of the Mill River and Lake Sabattia and its tributary watercourses that will be part of a lake management study to determine if dams could be operated to enhance environmental protection without compromising public safety.

Over the past three years, BRP has developed a set of innovative Comprehensive Compliance Strategies (CCS) focused in the drinking water supply and wastewater discharge programs. These strategies have successfully integrated compliance assistance with standardized and graduated enforcement actions to yield significant compliance results. Compliance assistance programs include training opportunities, compliance incentive awards, warning notices and the use of third party non-regulatory technical and administrative circuit riders. The enforcement strategies were designed with pre-determined escalating penalties that created an incentive for voluntary and prompt return to compliance. Where compliance is not forthcoming, targeted inspections and higher-level enforcement is initiated.

These comprehensive assistance-enforcement strategies have produced effective results by motivating permittees to consistently report on their compliance status and initiate corrective actions where regulatory or permit standards were being exceeded. Violations for failure to monitor water quality dropped 40 percent and operational violations dropped over 50 percent since the initiation of the Water Supply CCS. In the drinking water program, across the entire Commonwealth there were no water born disease breakouts and 97 percent of all 1,595 public water systems including transient non-community systems such as restaurants and campgrounds met all state and federal drinking water standards.

The groundwater discharge initiative also has proven effective in motivating the regulated sector to improve their operation and maintenance procedures, leading to identification and correction of violations. Prior to implementation of the Groundwater Discharge CCS, 15 percent of the permitted universe was out of compliance with the requirement to submit monthly discharge monitoring reports (DMR), and 11 percent failed to submit required permit renewals. At the conclusion of first phase of the CCS, a 100 percent compliance rate was achieved for the submission of DMRs and permit renewals. A similar strategy is also being employed with the holders of National Pollution Discharge Elimination System (NPDES) permits in coordination with EPA, which shares responsibility for NPDES compliance. DEP has targeted inspections in accordance with the watershed basin schedule and compliance results will be published in the FY 2001 report.

The comprehensive compliance strategies described above set out complete approaches to enforcement for selected BRP programs, including compliance assistance for the regulated community and extensive training for BRP staff. In addition to these over-arching strategies, BRP pursues numerous, more narrowly focused enforcement initiatives. Initiatives are usually one-time projects designed to solve specific problems. An initiative may also serve to bridge an enforcement gap until a CCS can be implemented. BRP initiatives included Title 5 systems (innovative/alternative and large systems); and auditing



CASE HIGHLIGHT

A contractor in Central Massachusetts had altered wetlands by land cleaning, grading and installing culverts on two house lots. In addition to paying a penalty, the contractor was ordered to remove all fill materials from the wetlands and implement a wetlands restoration plan approved by DEP. The lot owners were also required to pay a penalty and implement wetlands preservation requirements under a separate

Certified Drinking Water laboratories and Water Management Act registrations and permit renewals. Also, through major enforcement actions involving communities in the Merrimack, Mystic/Alewife, Charles River basins and the Massachusetts Water Resource Authority, BRP is pursuing improved river water quality by requiring communities to identify and eliminate illegal wastewater connections and bring combined sewer overflows into compliance with federal Clean Water Act and state Water Quality Standards.

BUREAU OF WASTE SITE CLEANUP

The Bureau of Waste Site Cleanup (BWSC) is charged with implementing M.G.L. chapter 21E and the Massachusetts Contingency Plan (MCP). Chapter 21E and the MCP regulate the remediation of releases of oil and hazardous materials to the environment in order to protect human health and the environment.

BWSC focused its strategic compliance and enforcement efforts in two areas: increasing the compliance rate for the classification and remediation of sites by responsible parties (non-responders); and the audit of sites by BWSC staff to ensure that remediation has been conducted in accordance with DEP regulations and Activity and Use Limitations (AULs) placed on the site to protect public health.

CASE HIGHLIGHT

BWSC participated in the development and resolution of the Attorney General's civil enforcement action against a large electrical equipment manufacturer for its failure to notify of a release or threat of release of hazardous materials and failure to comply with a DEP request for information. The case resulted in a penalty of \$1.25 million and substantial remediation activities.

Non-responder enforcement continued to be a top priority for the Bureau during FY 2000. The magnitude of noncompliance varies from failing to notify and perform required response actions to failure to make required submittals and demonstrate acceptable progress at sites. BWSC developed a comprehensive enforcement strategy against non-responders in FY 2000, and intends to implement it in FY 2001. The strategy incorporates a new streamlined approach consisting of issuance of NONs followed by a pre-calculated Standard Penalty Assistance Notice (SPAN) for failure to document progress by making required submittals for the most significant response actions/timelines based upon the site meeting certain factual criteria. The SPAN for failure to Tier classify, for example, has been finalized at \$7,000. The threat of this penalty has proven to be significant enough to compel most Potential Responsible Parties (PRP) to comply with the NON without having to resort to the SPAN.

Several operational changes have been made to the Audit program to add elements of credible deterrence that will increase the performance standards for the privatized program. Many submittals documenting response actions taken throughout the site cleanup process are being screened and triaged, affecting the timing of compliance and enforcement actions. In addition, short notice inspection audits were incorporated into the Audit program during FY 2000 to assess compliance at sites with Activity and Use Limitations (AUL), Remedy



CASE HIGHLIGHT

Investigation of a bulk fuel terminal operator uncovered systematic violations of the Massachusetts Contingency Plan for failure to report and remedy spills of gasoline into the Chelsea River. The company also had multiple violations of its NPDES permit as a result of gasoline releases through a defective storm water control system. In addition to a \$500,000 penalty, the company agreed to implement an EMS and independent compliance audits, and pay \$500,000 to the Massachusetts Environmental Trust Fund. The funds will be used to reduce storm water impacts on the Town Line Brook.

Operation Status (ROS) and other active remedial work. BWSC has developed standard auditing tools and correspondence for added consistency across regions. Some of the changes to the Audit program will likely result in increased enforcement response.

During FY 2000, for the first time since inception of the privatized program, BWSC was able to meet the 20 percent statutory audit mandate. Approximately 36 percent of sites subject to annual compliance fees were audited. A total of 191 sites (44 percent random and 56 percent targeted) were comprehensively audited in FY 2000. Although 52 percent of sites audited required further documentation to adequately review the LSP's opinion, in less than 10 percent of the sites was the opinion later invalidated by the supplemental information.

BWSC has observed an increase from previous years' (30 to 40 percent) in the number of submittals/Licensed Site Professional (LSP) opinions that require additional assessment/fieldwork following an audit. The increase may be attributed to the maturity of the program and that the Bureau is primarily auditing Comprehensive Response Actions and sites with Activity and Use Limitations, which are more complex actions than the previously audited Preliminary Response Actions. In addition to comprehensive evaluation audits, BWSC conducted technical screen audits on 1,826 LSP Opinions/submittals and short notice compliance inspections at 236 sites.



SECTION 2: COMPLIANCE ACTIVITIES

Compliance and Enforcement Output Measures for FY 2000

An analysis of compliance and enforcement activity can be a useful management tool. It may be used as a measure of accountability to compare actual with planned performance targets. Also, a comparison of the results of similar program segments in different regions may uncover inconsistencies that highlight trends in performance that may indicate emerging problems. However, as noted elsewhere in this report, an analysis of activity measures alone is a limited, incomplete method of evaluating the overall success of a compliance and enforcement program because it does not convey the behavioral changes in the regulated community or the environmental benefits resulting from those actions.

This analysis of compliance and enforcement "beans" will principally focus on the following:

1. Total number of inspections conducted (announced and unannounced);
2. Number of Notices of Noncompliance (NONs) issued;
3. Number of administrative actions in which higher level enforcement is taken;
4. Amount of administrative penalties assessed and collected;
5. Number of actions referred to the Attorney General for civil and criminal enforcement; and
6. Staff resources committed to compliance and enforcement activities, measured as "Full Time Equivalents" (FTEs).

FY 2000 marked the third full year of implementation of the DEP Enforcement Response Guidance (ERG), which took effect in April 1997. The ERG was developed, in part, to guide DEP managers and staff in the appropriate use of higher-level enforcement.

The ERG defines higher-level enforcement (HLE) as "an enforcement response with consequences more severe than those resulting from a Notice of Noncompliance." By this definition, HLE can include: administrative orders; Penalty Assessment Notices; administrative



consent orders (with or without penalty); Notices of Response Action; permit and license sanctions; civil and criminal judicial prosecution; and referral to the U.S. Environmental Protection Agency for enforcement. The ERG prescribes that specified types of cases are presumed to warrant HLE, and are not appropriately addressed by a Notice of Noncompliance (NON).

An analysis of FY 2000 activity, discussed more fully below, reveals:

- A 21 percent increase in HLE actions over FY 1999, which includes an 18.5 percent increase in the number of administrative penalties issued;
- The number of inspections remained nearly level with only a 0.3 percent increase;
- The use of NONs decreased by 1.4 percent, in contrast to a 25 percent increase in the use of NONs in FY 1999; and
- The most notable increase occurred in the number of referrals to the Attorney General, an increase of 35 percent.

Inspections

The physical visit and review of a regulated site/facility, i.e. the traditional inspection, remains the mainstay of DEP's compliance assessment activities. Inspections can be initiated for a variety of reasons including: proactive and planned as part of program compliance assessment initiative; follow-up to previous agency actions e.g. enforcement; and response to complaints.

In FY 2000 inspection activity level remained above the 7,000 mark, with a very slight (0.3 percent) increase over FY 1999 level (7065 compared to 7046 in FY 1999). The breakdown of inspection activity levels by major programs is summarized below:

- Bureau of Resource Protection: 2688 inspections, which exceeded the annual inspection target by 13 percent. The slight decrease in activity levels from FY 2000 was attributed to the variable annual watershed schedules;
- Bureau of Waste Prevention: 2576 inspections, which was an increase of 6 percent over FY 1999 which exceeded the planned level of activity;
- Bureau of Waste Site Cleanup: 1277 inspections, which was a slight decrease from FY 1999 (1292) but generally consistent with the planned level of activity; and
- Environmental Strike Force: completed 492 inspections which was an increase of 6.5 percent over FY 1999 activity levels (462);

Inspection activity levels can vary from year to year. This fluctuation is a normal pattern as compliance and enforcement



initiatives in DEP's multiple programs and regions can vary from year to year. Overall, DEP's inspection activity levels remain robust, staying above 7,000 for the past three years.

Notices of Noncompliance (NONs)

NONs are the lowest form of formal enforcement in DEP's "enforcement toolbox." NONs are generally used to require correction of minor compliance problems, provide notice that an existing practice is unacceptable, and/or take the first official step of establishing a formal process for issuing administrative penalties if problems are not corrected or reoccur.

The number of NONs issued by DEP during FY 2000 remained nearly level at 2649 in comparison to 2686 in FY 1999. A summary of NONs issued by major programs is presented below:

- Bureau of Resource Protection- 957 NONs
- Bureau of Waste Prevention- 862 NONs
- Bureau of Waste Site Clean-up- 830 NONs

There was a very minor decrease (one percent) in the number of NONs issued by DEP in FY 2000 when compared to the previous year. This decrease is considered statistically insignificant. However, as with inspection numbers, the factors that play into determining the total amount can vary by program from year to year. A closer look at some trends in FY 1999 and FY 2000 in the use of NONs demonstrates this variable pattern. In BRP, the number of NONs decreased in FY 2000 by 16 percent compared to FY 1999. The relatively higher number in FY 1999 was principally due to the first phase of an initiative that relied on NONs to reduce the backlog of monitoring and reporting violations in the water supply program. In comparison, the use of NONs in the BWSC increased by nearly 20 percent in FY 2000 when compared to the FY 1999 total. This increase in NON issuance was the result of a BWSC initiative targeted at "non-responders" which began in FY 2000.

To account for these expected program-by-program variations it is often useful to monitor statewide totals and percentage of NONs issued as compared to inspectional activity. In both cases the NON numbers were fairly stable from FY 1999 to FY 2000.

Higher Level Enforcement (HLE) Activities

For FY 2000, the target for HLE activity remained the same as for FY 1999: between 6 percent and 8 percent of all DEP inspections should result in HLE. This report shows that administrative and judicial HLE was **8.1 percent of inspections** up from 6.7 percent attained in FY 1999. **HLE increased 21 percent** over the same period while



inspection numbers remained virtually level. The following analysis is discussed principally from a statewide perspective.

Administrative HLE activity increased for the **third** consecutive year both in the number of actions taken (547 compared to 453 in FY 1999, an increase of 21 percent) and as a percentage of inspections conducted. More administrative penalties were issued as well (256, up from 216 in FY 1999, an increase of 18.5 percent). Although multiple causes are likely to have contributed to these gains, three major factors are:

- **Effective guidance.** The ERG provides clear direction to compliance and enforcement staff when a violation merits HLE. Model penalty and administrative consent order documents increase staff productivity.
- **Planned and Coordinated Targeting.** Bureau and regional compliance and enforcement leaders have used the program planning process to improve the strategy and tactics of enforcement targeting. Examples include:
 - BRP's Comprehensive Compliance Strategies;
 - BWP's targeting to implement the Stage II regulations; and
 - BWSC's initiative directed at non-responders.
- **Management Oversight.** DEP managers in planning and implementing compliance and enforcement program objectives, as well as in individual case decision-making, are exercising more diligence.

The following observations are noteworthy when reviewing HLE activity during FY 2000:

- As noted previously, the ERG prescribes that certain types of cases are presumed to warrant HLE and are not appropriately addressed by a NON. The Regional Enforcement Review Committee (RERC) in each region must review these cases to determine the appropriate response. The regions report that there continues to be a high level of RERC case review activity since ERG implementation.
- Statistics reveal that **BRP statewide** continues its upward trend in taking HLE in two respects. HLE actions increased nearly 8 percent between FY 1999 and 2000. The percentage of inspections resulting in HLE increased from 7.5 percent in FY 1999 to 8.3 percent in FY 2000.
- **BWP statewide** increased both its number of inspections (by 6 percent) and its number of HLE cases (by 17 percent) during FY 2000. The percentage of inspections resulting in HLE improved slightly from 6 percent in FY 1999 to 6.6 percent in FY 2000.
- **BWSC statewide** demonstrates a significant increase in HLE as a percentage of inspections from 7.8 percent in FY 1999 to 10



percent in FY 2000. (BWSC counts Notices of Response Action (NORAs) and Notices of Intent to Mobilize (NOIMs) as forms of HLE in its analysis.) The number of inspections dropped slightly from FY 1999 (1292) to FY 2000 (1277) although the drop is only 1 percent - not significant enough to diminish the significance of the improvement.

- The **Clean State** initiative reached a major milestone with DEP's execution of Administrative Consent Orders with 25 state agencies, authorities, and educational institutions. The ACOs established enforceable timelines to bring all matters outstanding as of June 30, 2000 into compliance. The Commonwealth has spent over \$250 million to resolve more than 2000 non-compliance matters since the commencement of the Clean State program.
- **A.G. Referrals** The number of cases referred to the Attorney General's Office for judicial prosecution improved for the first time in 3 years, increasing by 35 percent (17 referrals in FY 1999 to 23 in FY 2000). The number of referrals, however, remains low in contrast to previous years (50 in FY 1997 to 40 in FY 1998). The overall decrease may be explained, in part, by DEP's more aggressive pursuit of enforcement cases administratively and limits on the AG's Office to significantly increase its caseload. The civil penalties assessed from referrals amounted to over \$4 million. The increase during FY 2000 may be attributed to increased staffing in the Environmental Protection Division of the Attorney General's Office, and resolution by the AG of several large and complex environmental cases.

Administrative Penalties have shown a decreasing trend in average amounts per penalty action. The summary below reflects this trend:

- FY 2000: \$6,300
- FY 1999: \$6,500
- FY 1998: \$13,100

Some of the factors attributing this trend include:

- A more complete "institutionalization" of the ERG in enforcement decision making, providing more consistency across programs and regions;
- Expanded use of penalty mitigation opportunities for municipal entities and small businesses;
- Increasing use of supplemental environmental projects (SEPs) in lieu of direct penalty payments; and
- Program specific enforcement initiatives where lower level penalties are utilized to stimulate a compliance response rather than attempt to collect a substantial penalty or risk prolonged appeals on lower threshold violations.



DEP will continue to analyze the "pros" and "cons" of this trend in average penalties. While initial reactions could focus on the potential negative aspects of this trend, further analysis reveals greater consistency in enforcement response actions to comparable violations across different programs. This consistency is considered a positive result of the ERG. Additionally, anecdotal evidence suggests that the stigma attached to being issued a penalty is more important in providing deterrence for most of the regulated community than the actual amount of the penalty. However, DEP will continue to review and monitor this aspect of our enforcement "beans" and will make adjustments to the ERG if found appropriate.

FY 99-FY 2000 Enforcement Activity Comparison

	FY 1999 TOTALS	FY 2000 TOTALS	CHANGE (FY 1999 TO FY 2000)
Higher Level Enforcement Cases (Admin. Only)	453	547	+ 21%
Admin. Penalty Cases	216	256	+ 18.5%
Admin. Penalty Dollars Assessed	\$1.571 million	\$1.613 million	+ 2.7%
Referrals to Attorney General	17	23	+ 35%
Notices Of Non- Compliance	2686	2649	- 1.4%
Compliance Inspections Performed	7046	7073	+ 0.38%
Higher-Level Enforcement as a Percentage of Inspections	6.7%	8.1%	+ 19%



Compliance and Enforcement Resource Commitments: FTE's

In FY 2000, DEP's commitment of staff resource "full time equivalents" (FTEs) to compliance and enforcement activities was at historic high at 154 FTEs. This represents an increase of about 4 percent over FY 1999 and continues the increasing trend over the last few years.

The Decade in Compliance and Enforcement "Beans"

In the 21st Century, DEP is focusing more on measuring the environmental results of compliance and enforcement efforts rather than just focusing on the numbers (i.e. "beans") of compliance and enforcement related activities. However, at the beginning of the 1990s the focus was much more on the numbers, with the analysis being generally done by individual programs with independent data systems. As previously noted, even as we focus less on measuring DEP activities and more on measuring and evaluating the results of those activities, there is value in reviewing compliance and enforcement beans, particularly longer term trends. This section reviews and compares the status of compliance and enforcement activities in the early 1990s to those of the last few years; more or less a comparison of the beginning of the decade to the end of the decade.

As we begin to address this topic, it is important to note data quality and data systems have improved substantially with regard to tracking compliance and enforcement activities. As a result the agency has more confidence in more recent data than that for 10 or more years ago. Additionally, DEP continues to update and improve the quality of our compliance and enforcement data from earlier years. Although there are limitations to comparing specific numbers from similar data categories due to changes and improvements in data quality and systems, the information is still valid for identifying larger scale comparisons and trends.

The highlights of this comparison of compliance and enforcement activities from the beginning of the 1990s to the beginning of the 21st century are summarized below:

- In the late 1980s/early 1990s, DEP completed 4,000 to 5,000 inspections a year, in the late 90s the inspections are in the range of 7,000 up to 8,000 a year;
- In the early 1990s, DEP issued NONs at a rate equivalent to about 25 to 30 percent of the facilities inspected, in the last few years the NON rate is in the 35 to 40 percent range;
- In the early 1990s, DEP commenced HLE actions at a rate of 3 to 5 percent of inspections; in last two to three years the HLE rate has



been in the 6 to 8 percent range (with the HLE rate exceeding 8 percent for the first time in FY 2000);

- In the early 1990s, DEP dedicated about 85-90 FTEs per year to compliance and enforcement activities. At the end of the 1990s this has increased by almost **70 percent** to over 150 FTEs per year. Additionally, DEP ends the decade committing more FTEs to compliance and enforcement activities than permitting- it was the reverse in the early 1990s.

Comparing data on penalties over time is a little more problematic than other enforcement activity measures. Usually total penalty dollars assessed and average penalty amounts per enforcement action are two measures frequently referenced in penalty activity discussions. In the late 1980s/early 1990s, DEP's adjudicatory appeal system was overloaded with unilateral enforcement penalty cases that had been appealed. The results were significant delays (often years) in settling enforcement cases; settlements often ended up with a small percentage of initial penalty assessments actually being collected; and a general deterioration of the enforcement effectiveness of DEP's administrative penalty program.

Starting in the early 1990s, programs were initiated to revitalize the administrative penalty "tool" in DEP's enforcement "toolbox." Eliminating the appeal backlog, streamlining the adjudicatory hearing process and instituting guidance on using more administrative consent orders (with penalties) resulted in DEP collecting over 90 cents of every penalty dollar assessed by the mid 1990s.

Mainly as a result of the events described above, it can be difficult to make even general comparisons of many penalty statistics that cover the 10 plus year time period of the late 1980s to the present. It is generally accepted, however, that average penalty amounts assessed per enforcement action are much lower now than they were 10 (+/-) years ago. This is particularly apparent since 1997 when the ERG was issued and has guided DEP enforcement decision-making since then.

A general assessment of DEP's penalty activity in the year 2000 as compared to 10 (+/-) years ago is as follows:

- More penalties are being used as part of DEP's enforcement program (in the range of 2 to 3 times more than the early 1990s);
- Total penalty dollars assessed are generally in the same range (within a few hundred thousand each year);
- Average penalty amounts assessed are much lower; and
- Total dollars collected as a percentage assessed are much higher.



Summary Conclusions

Overall, an analysis of DEP's compliance and enforcement activities reveals a robust enforcement program. There is a healthy balance among the use of various compliance assistance and enforcement tools helping DEP programs achieve their environmental protection goals.

Many of the compliance and enforcement categories show significant increases in activity levels over the decade of the 1990s. This demonstrates both the continuing need for a vigorous program to combat non-compliance, and the long term results of DEP's efforts in resource allocation and strategic planning. DEP is doing a better job of targeting its compliance and enforcement efforts. Less time is spent going to the facilities that have demonstrated good compliance, freeing up staff to inspect facilities and sites that will produce more enforcement "bang for the buck." More strategic focus is also spent on types of facilities or geographic areas where compliance and enforcement yields greater direct support and linkage to program goals.

The bottom line: DEP is getting smarter and achieving more results and environmental protection from our regulatory compliance and enforcement activities.



SECTION 3

THE FUTURE

To remain a relevant and effective environmental protection agency we must periodically ask ourselves the seemingly simple, but not so easily answered questions: Where are we going as an agency and how do we do get there? More specific to compliance and enforcement: How can compliance and enforcement, at the core of a regulatory agency, be used to improve environmental quality? The question implies a link between the goal (an effective compliance and enforcement program), the activities conducted (specific compliance and enforcement actions) and meaningful measures of success (positive environmental results). While this observation may seem an academic one, it is in fact a very practical matter confronting DEP.

There is a base level of compliance and enforcement activity that cuts across all programs in order to provide a “level playing field” and deterrence. However, there are ways in which programs have focused compliance and enforcement resources to forge stronger links between agency goals and individual compliance and enforcement actions to yield greater environmental results.

In the upcoming years, DEP will be taking a number of important steps towards a more fully integrated and comprehensive compliance and enforcement program:

- identify cost-effective options for designing and implementing information technology applications to improve automation and analysis of compliance and enforcement data;
- identify specific compliance and enforcement strategic initiatives in DEP's FY 2002 Program Plan and Performance Partnership Agreement with EPA;
- roll out additional sectors of the Environmental Results Program and, with funding from EPA, lead a national innovations initiative aimed at disseminating the ERP program to other States;



- create a sub-committee of DEP's Fees and Policy Advisory Committee to work closely with DEP on compliance and enforcement issues;
- launch an Environmental Management Systems (EMS) program to: train local school officials and departments of public works on implementing EMS to ensure compliance; encourage industries to use EMS to go beyond compliance; disseminate the results of DEP's laboratory EMS to other laboratories and institutions (e.g. colleges universities, high schools) to facilitate their use of laboratory EMS to minimize and control chemical and biological wastes;
- contract with Green Mountain Institute to assist in developing environmental performance measures for four priority areas, discuss proposed measures with a broad-based group of stakeholders at DEPartners Day (June 28th, 2001), and, based on those discussions, develop and track environmental performance measures that link specific program activities (including compliance and enforcement) to the environmental measures that we decide to use.

DEP is expects that next year's Compliance and Enforcement Report will show improvements in communicating the success of our programs, both in terms of numerical analyses as well as the environmental results of baseline compliance and enforcement activities combined with strategic enforcement initiatives.



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